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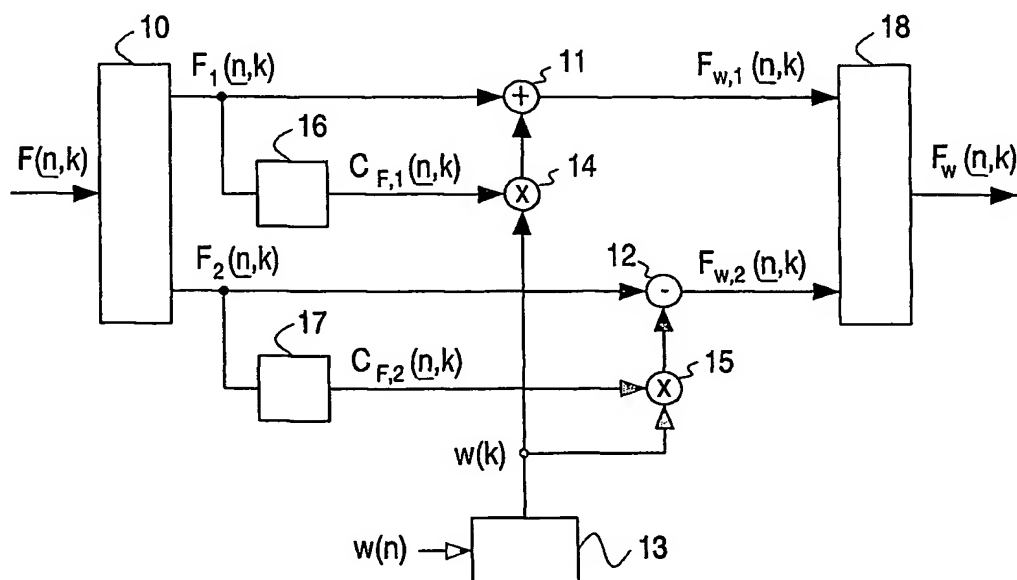
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(54) Title: **WATERMARK EMBEDDING AND DETECTION OF A MOTION IMAGE SIGNAL**



(57) Abstract: Methods and arrangements are disclosed for embedding and detecting a watermark in a cinema movie, such that the watermark can be detected in a copy made by a handheld video camera. The watermark embedder divides each image frame into two areas. A watermark bit '+1' is embedded in a frame by increasing the luminance of the first part and decreasing the luminance of the second part. A watermark bit '-1' is embedded by decreasing the luminance of the first part and increasing the luminance of the second part. It is achieved with the invention that the embedded watermark survives 'de-flicker' operations that are often used to remove flicker caused by the different frame rates of cinema projection equipment and consumer camcorders.

**Declaration under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT,

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